Abstract for
paper to be presented at the 11th Annual AIA A/ Utah State University
Conference on Small Satellites

Microspacecraft Secondary Payload Mission Opportunities

by

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Worldwide secondary payload launch capabilit ics and fut ure opportunist ics have been studied at the Jet Propulsion Laboratory (JPL). Launch vehicles which have been identified as having near-term secondary payload opportunities for launching microspacecraft include; Pegasus, Taurus, LMLV-1, Delta 11, Atlas 11, Space Shuttle, Ariane 5, HIIA, Molniya, Cosmos, and Proton. Interface requirements and contact information have been identified for these. The secondary payload launch capabilities are summarized and example mission types are described for some of these opportunities.

Several types of microspacecraft missions can be accomplished with secondary payloads. We have studied several mission concepts at JPL inducting advanced technology demonstrate ion platforms, a constel I at ion of cl i mate monitoring microspacecraft, low-cost university technology demonstration platforms, a Medium Earth Orbit (MEO) technology validation platform, and the use of Geosynchronous Transfer Orbit (GTO) for deep space trajectory missions.

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